



STATE OF MARYLAND

# DHMH

**Maryland Department of Health and Mental Hygiene**  
300 W. Preston Street, Suite 202, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

**Office of Preparedness & Response**

Sherry Adams, R.N., C.P.M, Director

Isaac P. Ajit, M.D., M.P.H., Deputy Director

**July 1, 2011**

## Public Health & Emergency Preparedness Bulletin: # 2011:25 Reporting for the week ending 06/25/11 (MMWR Week #25)

### CURRENT HOMELAND SECURITY THREAT LEVELS

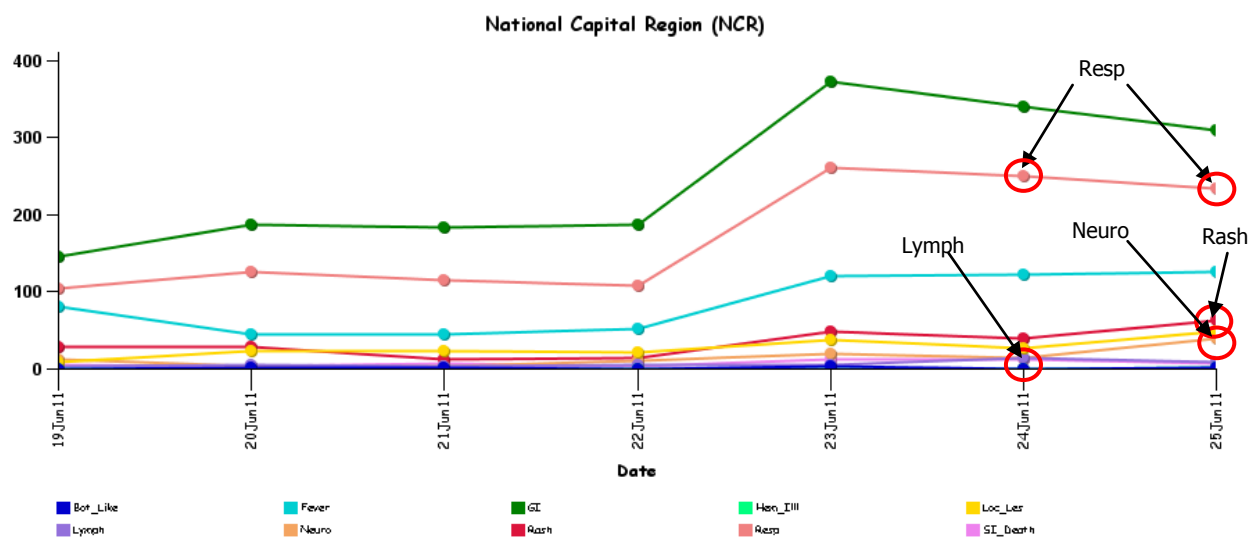
**National:** No Active Alerts  
**Maryland:** Level One (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

#### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

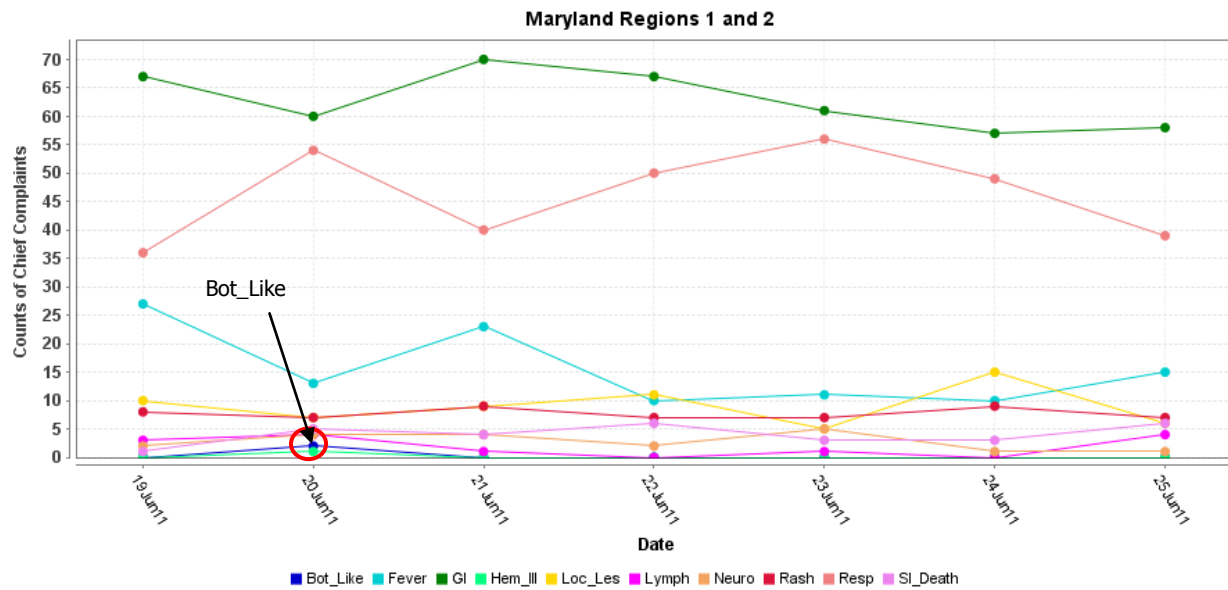
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

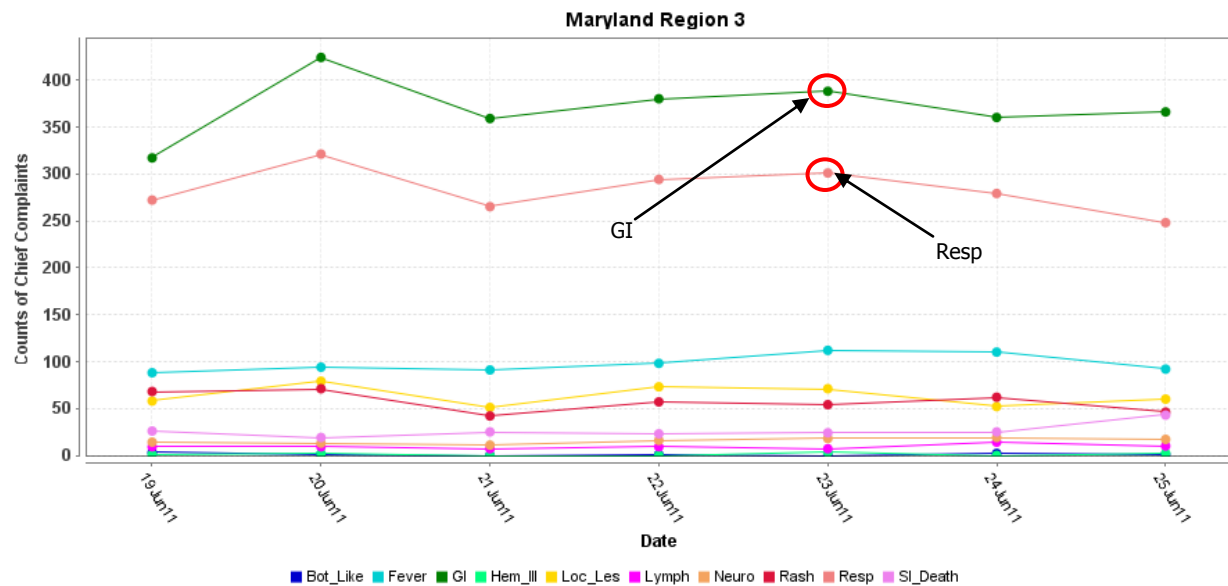


\*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

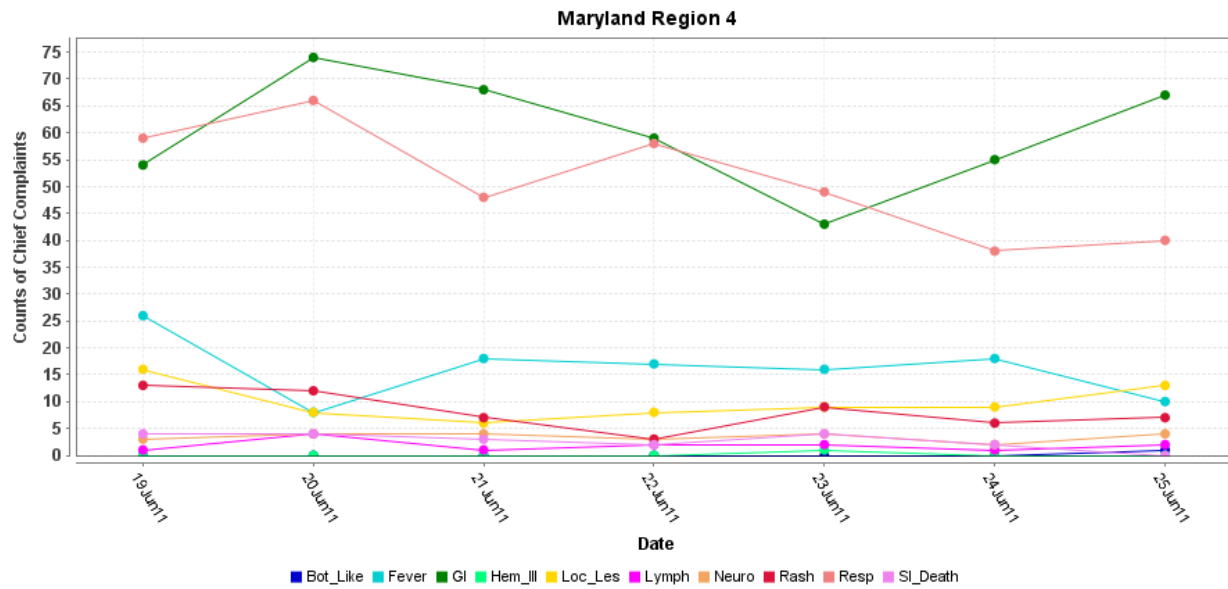
## MARYLAND ESSENCE:



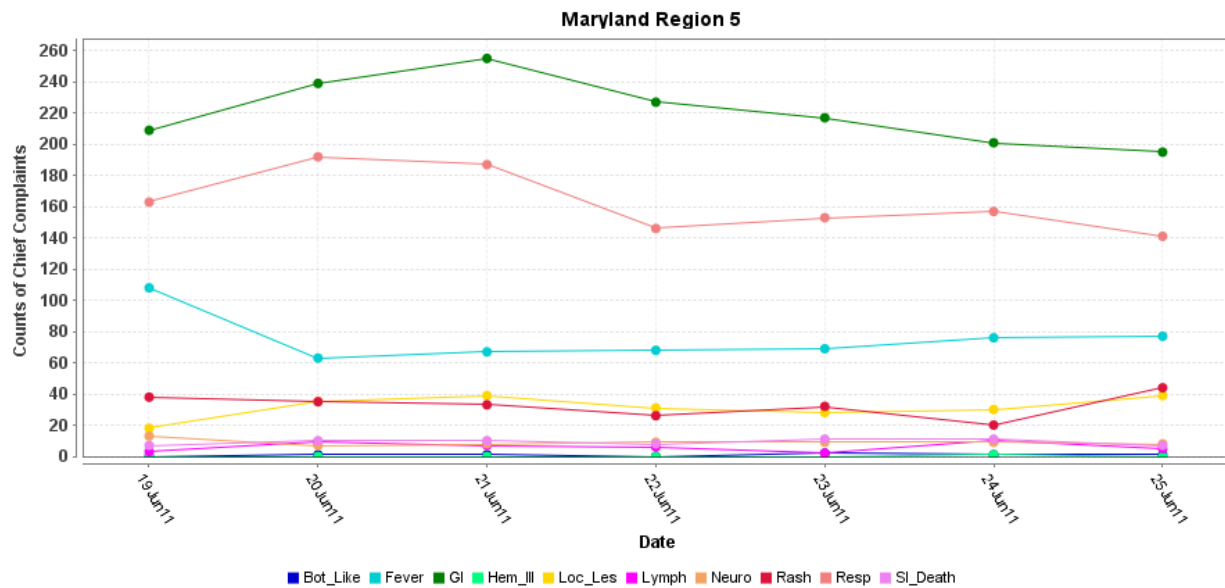
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

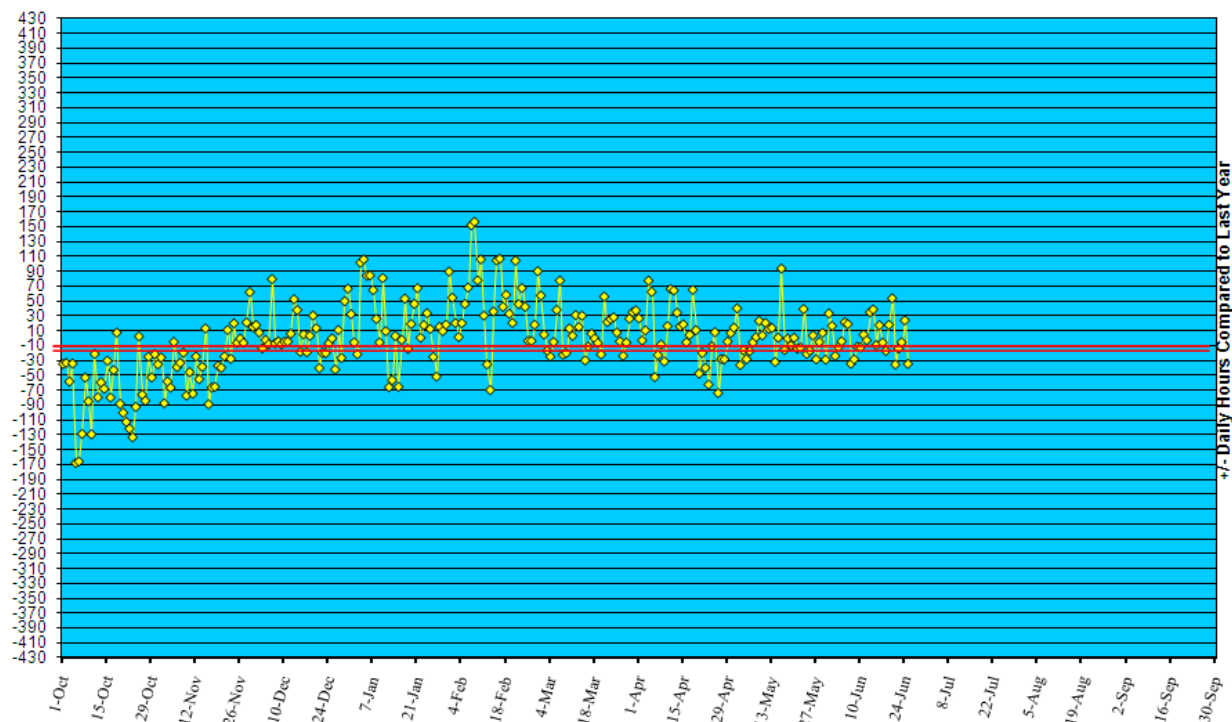


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/10.

### **Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to June 25, '11**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2011 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

#### **Meningitis:**

New cases (June 19 – June 25, 2011):

Prior week (June 12 – June 18, 2011):

Week#25, 2010 (June 20 – June 26, 2010):

#### **Aseptic**

7

6

8

#### **Meningococcal**

0

0

0

**5 outbreaks were reported to DHMH during MMWR Week 25 (June 19 – June 25, 2011).**

### **1 Gastroenteritis outbreak**

1 outbreak of GASTROENTERITIS in a School

### **2 Respiratory illness outbreaks**

1 outbreak of AFRD in a Nursing Home

1 outbreak of PNEUMONIA in a Nursing Home

### **2 Rash illness outbreaks**

1 outbreak of RASH ILLNESS in an Assisted Living Facility

1 outbreak of HAND, FOOT, AND MOUTH at a Daycare Center

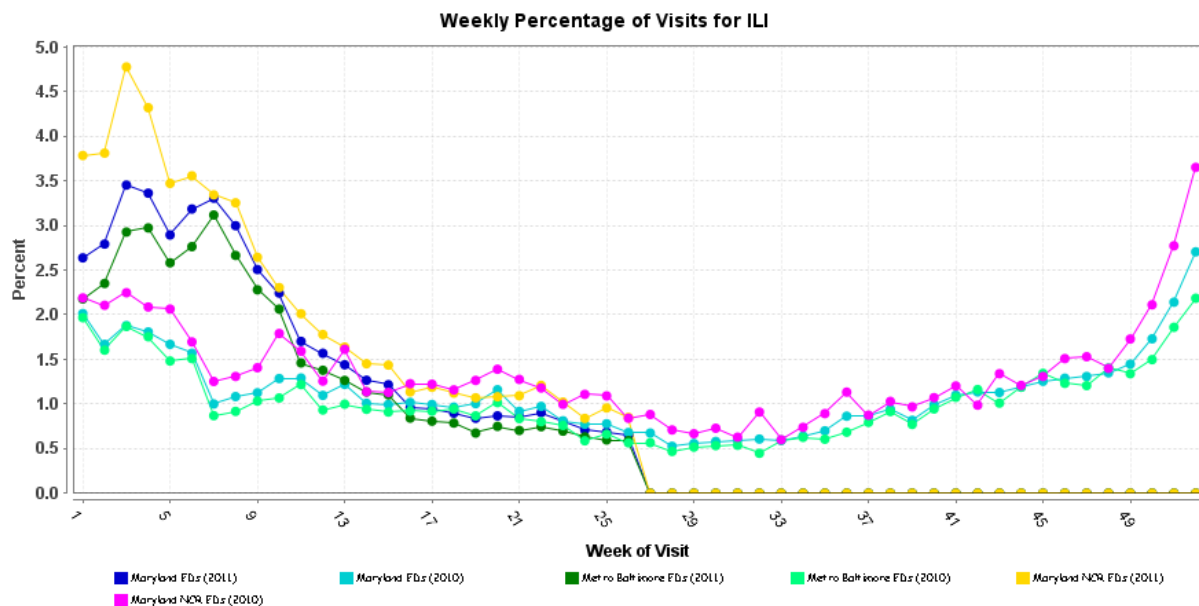
## **MARYLAND SEASONAL FLU STATUS**

Seasonal Influenza reporting occurs October through May.

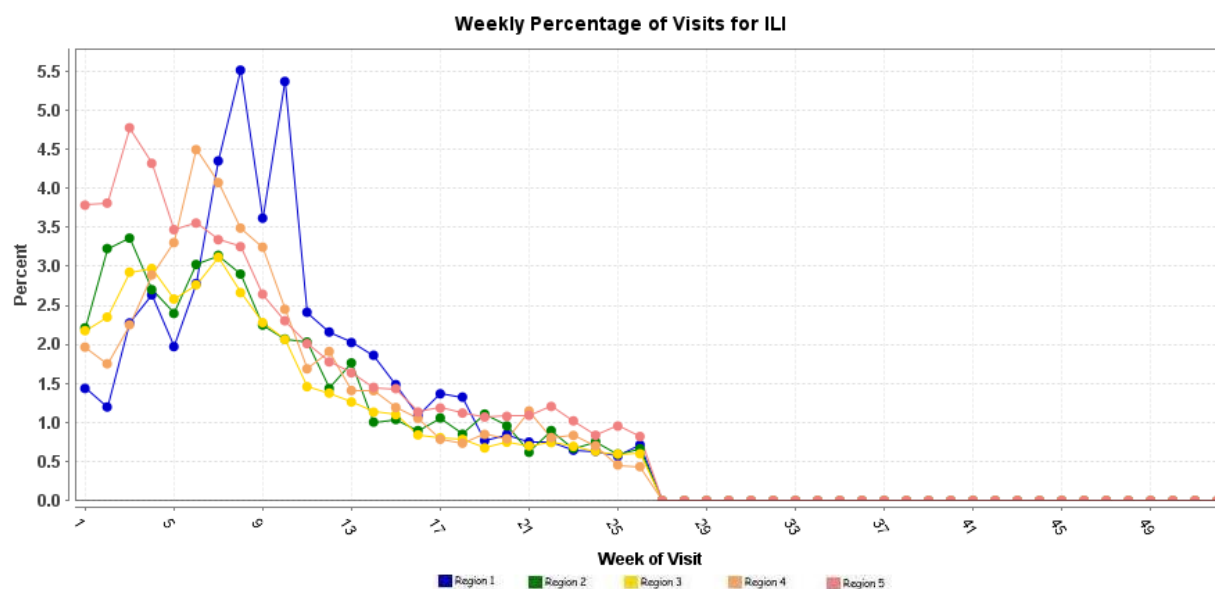
## **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

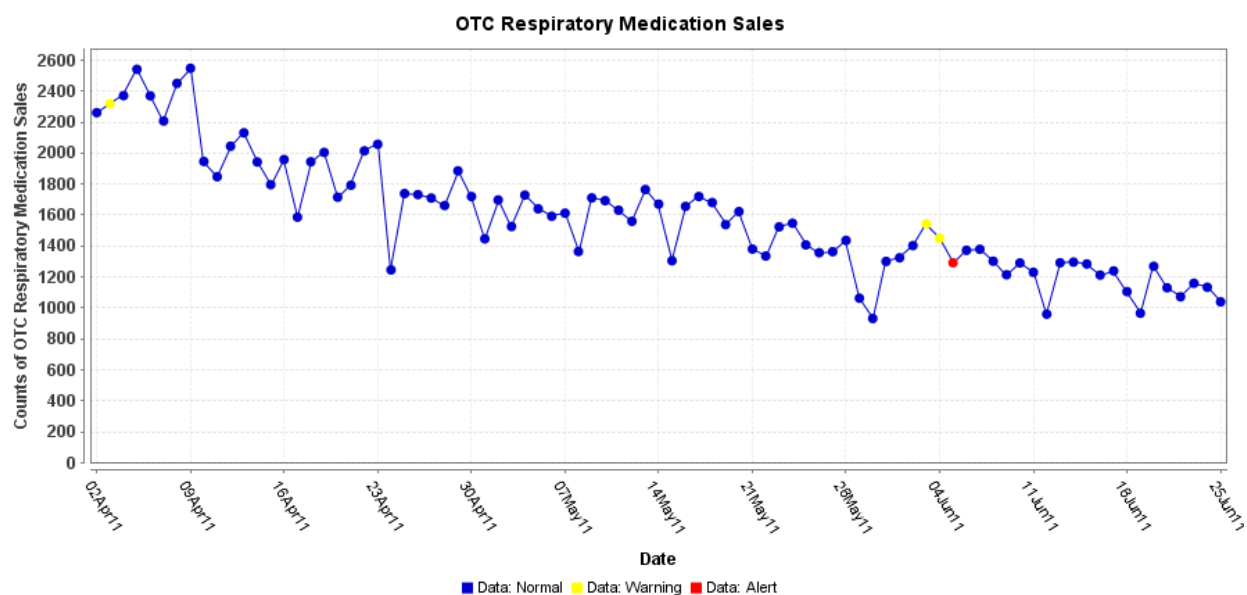


\* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



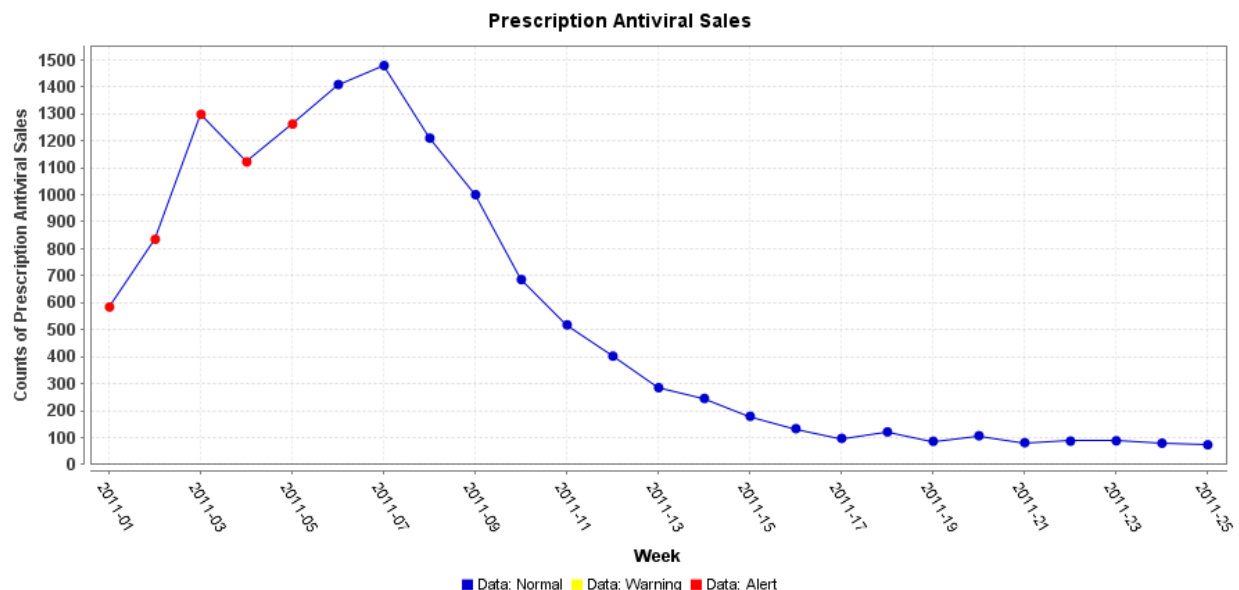
#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



## **PRESCRIPTION ANTIVIRAL SALES:**

Graph shows the weekly number of prescription antiviral sales in Maryland.



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of June 22, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 562, of which 329 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**AVIAN INFLUENZA, HUMAN (EGYPT):** 22 June 2011, As of Wed 22 Jun 2011 the Ministry of Health of Egypt has notified WHO of a new case of human infection with avian influenza A (H5N1) virus. The case is a 27 year old man from Qena governorate, Doshna district. He developed symptoms on 5 Jun 2011, was hospitalized and was put on oseltamivir treatment on 13 Jun 2011. He died on Tue 14 Jun 2011. Investigations into the source of infection indicate that the patient had exposure to poultry suspected to have avian influenza. The case was confirmed by the Egyptian sub-national laboratory for Influenza in Aswan and the Central Public Health Laboratories in Cairo, a National Influenza Centre of the WHO Global Influenza Surveillance Network. Of the 150 cases confirmed to date in Egypt, 52 have been fatal.

## **NATIONAL DISEASE REPORTS**

**HANTAVIRUS (NEW YORK):** 17 June 2011, The death of a man, a 35 year old chiropractor from Montauk, who succumbed to a short illness on Friday [17 Jun 2011], has sparked a town-wide scare that the [a] rodentborne hantavirus has returned to the South Fork. The panic was set off after the East End Foundation, which is fundraising for the man's wife and their 3 young children, sent flyers over the weekend that said the man had been cleaning out his basement when he contracted a deadly virus. But the alert might have been premature. Shira Barzilay, a spokeswoman for the wife, said the cause the death has not yet been confirmed. Grace McGovern of the Suffolk County Department of Health said whether the [a] hantavirus is being looked at as a cause of death could not be confirmed yet. "I would imagine many things are being investigated," she said, adding that the medical examiner's

office would have to make a determination 1st. Hantavirus[es] is [are] transmitted by airborne particles originating from rodent feces or urine. If people breathe in the particles, they can become infected. According to the Centers for Disease Control and Prevention [CDC], infection with hantavirus[es] can progress to hantavirus pulmonary syndrome (HPS), which has a mortality rate of 38 per cent. Barzilay said a pest control company had inspected the victim's house and had found no evidence of mouse droppings. There are a small number of hantavirus infection cases. A total of 560 cases of hantavirus pulmonary syndrome were reported in the United States through 15 Dec 2010. CDC said early symptoms include fatigue, fever and muscle aches, especially in the large muscle groups -- thighs, hips, back, and sometimes shoulders. Headaches, dizziness, chills, and abdominal problems, such as nausea, vomiting, diarrhea, and abdominal pain are experienced in about half the patients. All cases of infection have to be reported to the center's Viral Special Pathogens Branch. The victim, who was otherwise healthy, had been sick for about 8 days, Barzilay said. The family thought he had Lyme disease or some sort of mild virus. On Friday morning [17 Jun 2011], his family called for an ambulance. He was taken to the hospital at about 3 a.m. and died around 7:45 a.m., she said. The [a] hantavirus [infection] has been linked to at least 2 other deaths on the East End, though it's been more than 16 years since the last one. In January 1994, a 22 year old Brown University student who lived on Shelter Island, died from [a] hantavirus [infection]. According to The Daily News, investigators later isolated the hantavirus in a mouse trapped near the student's house. In 1995, a 25 year old landscaper from Bridgehampton, died after he was working around some mouse droppings. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) \*Non-suspect case

**CAMPYLOBACTERIOSIS (WISCONSIN):** 19 June 2011, Laboratory test results show that the *Campylobacter jejuni* bacterium that caused diarrheal illness among 16 individuals who drank unpasteurized (raw) milk at a school event early this month in Raymond was the same bacterial strain found in unpasteurized milk produced at a local farm, according to officials from the Department of Health Services (DHS) and Western Racine County Health Department (WRCHD). A parent had supplied unpasteurized milk from the farm for the school event. Stool samples submitted to the WRCHD by ill students and adults were sent to the State Laboratory of Hygiene where they tested positive for the bacterium. Department of Agriculture, Trade and Consumer Protection (DATCP) food inspectors collected milk samples from the bulk tank at the farm, which tested positive for *Campylobacter jejuni*. Further testing by the State Hygiene lab showed the bacterial strains from the stool samples and the milk samples matched. Additionally, interviews with event attendees revealed that consuming the unpasteurized milk was statistically associated with illness. Health officials said that this combination of laboratory and epidemiological evidence indicates that the illnesses were caused by the unpasteurized milk consumed at the school event. The farm did not sell the unpasteurized milk and there was no legal violation associated with the milk being brought to the school event. The farm is licensed and in good standing with the Department of Agriculture, Trade and Consumer Protection. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI O157/NON-O157 (TENNESSEE/VIRGINIA):** 19 June 2011, A potential *E. coli* outbreak that's plagued Northeast Tennessee since mid-May 2011 has sickened 2 more people, bringing the total number of confirmed cases in the 8-county Northeast Tennessee region so far in 2011 to 15. On Fri 17 Jun 2011 the Northeast Tennessee Regional Health Office announced that it confirmed the presence of the potentially fatal infection in 2 people who started showing symptoms of a Shiga toxin-producing *E. coli* infection on 7 and 9 Jun 2011. One is from Sullivan County, said Health Office Director David Kirshke. "We are working on all of these cases," Kirshke said, adding that his office is trying to find out whether these 2 new cases are in any way related to a series of 11 other confirmed cases that hit the region between 15 May and 2 Jun 2011. "But so far we have not found a common link between them." On 5 Jun 2011, a 2-year-old girl and her 5-year-old brother from Dryden, VA, were rushed to the Johnson City Medical Center's Pediatric Intensive Care Unit after they developed an *E. coli* infection. The girl died at the hospital that day while her brother was sent to another hospital for further treatment and later released. Kirshke said his staff is diligently working with the Virginia Department of Health to figure out if there is any connection between these 2 children and the 13 Northeast Tennessee residents with confirmed cases. Even though no common links have been found, the health officer said he is treating the situation like an outbreak because the dates these symptoms started showing up are in such a small period of time. He hopes test results from the 2 new cases that are due back next week will help his office solve the puzzle. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS**

**CHOLERA (HAITI):** 24 June 2011, Haiti has seen an increase in cholera cases since May 2011, due to a lack of access to clean water and sanitation, and the beginning of the rainy season and flooding, the Geneva-based World Health Organization (WHO) said on Fri 24 Jun 2011. The rise was particularly strong in the capital, Port-au-Prince, and the southern peninsula. In Port-au-Prince alone, WHO reported 18,182 new cases from 2 May 2011 to 12 Jun 2011. A shortage of funds was also threatening international health efforts in Haiti, it said. WHO said the number of nongovernmental organizations (NGO) fighting cholera in the country had decreased from several hundred at the beginning of the outbreak in 2010 to about 60 because of insufficient funding. For the same reason, the remaining NGOs had cut their programs in providing clean water and sanitation and other measures to contain the epidemic. According to Haiti's Ministry of Public Health, as of 12 Jun 2011, there had been a total of 344,623 cases of cholera and 5,397 related deaths. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**CHOLERA (DOMINICAN REPUBLIC):** 24 June 2011, Health authorities in the Dominican Republic say cholera has killed 2 more people, bringing the death toll from the disease to at least 48 people in the country. The Ministry of Health said the latest victims were a 29 year old man and a 63 year old man. The ministry said in a statement Mon 20 Jun 2011 that the deaths occurred over the weekend in Santiago, about 93 miles (150 kilometers) north of the capital. Cholera has sickened more than 1550 in the Dominican Republic since May 2011. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case



**ANTHRAX, HUMAN, LIVESTOCK (INDIA):** 22 June 2011, The state government on Monday [20 Jun 2011] asked the MKCG Medical College and Hospital, Berhampur, to send a medical team to Kandhamal district where some areas are in the grip of anthrax. This follows the death of a 40 year old man from suspected anthrax on Saturday [18 Jun 2011]. The blood sample of the deceased tested negative for anthrax. But that may be because he had already taken medicines, [according to] head of state diseases surveillance Dr Bikash Patnaik. 2 out of 9 samples taken from the 2 affected villages within Tumudibandh block had "morphologically" tested positive for anthrax. "It appears the disease in Tumudibandh is anthrax," [said] Dr Patnaik. The medical team, including a paediatrician, a medicine specialist, and a microbiologist, among others, will further assess the situation before confirming or ruling out anthrax, Dr Patnaik said. RM of Bada Gochhuka village, who was admitted to hospital due to suspected anthrax, died of liver failure, hospital sources said. 15 others, including 2 children of Sana Guchhuka and Bada Guchhuka villages, are suffering from suspected anthrax following consumption of rotten meat of cattle and goat. "We have tested the blood samples of 16 persons, who were suspected to be suffering from anthrax. While 7 of them were admitted to hospital, 9 samples were collected from the field by the medical staff of Kandhamal," said Dr Preetilata Panda, associate professor, microbiology, of MKCG Medical College and Hospital. Dr Panda sent her report to the health department as well as to Kandhamal district administration on Monday [20 Jun 2011]. Earlier, the veterinary experts have said domestic animals in the area tested negative for anthrax. Meanwhile, the medical college has discharged all patients who were admitted for anthrax treatment. The anti-anthrax vaccination drive for animals in the area by the animal resources department was on. Chief district veterinary officer of Kandhamal SC Mallick said around 4600 animals of 42 villages have been vaccinated so far. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI VTEC (FRANCE):** 22 June 2011, The outbreak strain of Escherichia coli O157 that sent 8 children to hospital suffering from hemolytic uremic syndrome (HUS) earlier in June 2011 has been found in a sample of "Steak Country chez Lidl" frozen hamburger patties. The contaminated hamburger carried a "best if used by" date of 11 May 2012, one of the 3 production dates recalled by La societe SEB, the manufacturer. The contaminated sample was retrieved from a patient's house during the course of the epidemiological investigation into the outbreak, according to information released by the Ministry of Agriculture, Nutrition and Fisheries. Investigators are working to determine the origin of the contamination, to trace the distribution of the recalled meat, and to monitor the effectiveness of the recall. Italy's Ministry of Health reported this morning that no E. coli was found in 8 samples of Steak Country products seized from a Lidl distribution center in Arcole (Verona Province). Of the 8 children who were hospitalized at the CHU de Lille due to HUS, 6 are still in hospital, one in a coma. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**E. COLI O104 (EUROPEAN UNION):** 22 June 2011, In the EU/EEA, 853 HUS cases, including 28 deaths, and 2833 non-HUS cases, including 12 deaths, have been reported so far. Today, Germany reports four new HUS cases and 89 new non-HUS STEC cases. Total cases: 3686 with 40/3686 -- 1.08 per cent case fatality rate. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

\*\*\*\*\*

**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-6745  
Fax: 410-333-5000  
Email: [ZFaigen@dhmm.state.md.us](mailto:ZFaigen@dhmm.state.md.us)

Anikah Salim, MPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-2074  
Fax: 410-333-5000  
Email: [ASalim@dhmm.state.md.us](mailto:ASalim@dhmm.state.md.us)